From:	Berg, Marlene
To:	Miller, Garyg
Cc:	Turner, Philip; Legare, Amy; Poore, Christine; Hawkins, CherylA; Burgess, Michele; Sanchez, Carlos
Subject:	RE: San Jacinto RBA Conference Call Follow-up
Date:	Tuesday, April 12, 2016 10:22:37 AM

Gary,

Thanks very much.
And, one question for you.

The 1/16/15 letter, in addition to the 240 ng/kg for soil - construction worker, also discussed levels for commercial workers (750 ng/kg) and the child recreational visitor (200 ng/kg). Will these 2 levels be used at the site?

Marlene

From: Miller, Garyg
Sent: Tuesday, April 12, 2016 10:23 AM
To: Berg, Marlene <Berg.Marlene@epa.gov>
Cc: Turner, Philip <Turner.Philip@epa.gov>; Legare, Amy <Legare.Amy@epa.gov>; Poore, Christine <Poore.Christine@epa.gov>; Hawkins, CherylA <Hawkins.CherylA@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>; Sanchez, Carlos <sanchez.carlos@epa.gov>
Subject: RE: San Jacinto RBA Conference Call Follow-up

Marlene,

Thanks; and yes, I am planning to use the RBA of 1 PRGs – 200 ng/kg for sediment & 240 ng/kg for soil - construction worker. Please let me know if you have any further comment on this.

Regards,

Gary Miller
Remedial Project Manager
EPA Region 6 – Superfund Division (6SF-RA)
214-665-8318
miller.garyg@epa.gov

From: Berg, Marlene
Sent: Monday, April 11, 2016 10:10 AM
To: Miller, Garyg <Miller.Garyg@epa.gov>
Cc: Turner, Philip <Turner.Philip@epa.gov>; Legare, Amy <Legare.Amy@epa.gov>; Poore, Christine <Poore.Christine@epa.gov>; Hawkins, CherylA <Hawkins.CherylA@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>
Subject: FW: San Jacinto RBA Conference Call Follow-up

Gary,
I wanted to follow up with information we had previously sent you regarding the use of an RBA for developing cleanup levels for dioxin in soil at the San Jacinto site. Would you let me know if the intent is to use an RBA of 1.0 along with the soil dioxin levels identified in the email below?

I would like to add that the link for the Regional Screening Levels (as noted in the email below) is now at https://www.epa.gov/risk/regional-screening-levels-rsls
While not final remediation goals, screening levels may be used as a starting point in developing cleanup levels (while the attached 1/16/15 meeting follow-up memo uses the term protective concentration levels (PCLs), this term is not used by the Superfund program).

Marlene

From: Berg, Marlene
Sent: Tuesday, March 03, 2015 4:36 PM
To: Miller, Garyg <Miller.Garyg@epa.gov>; Turner, Philip <turner.philip@epa.gov>
Cc: Burgess, Michele <Burgess.Michele@epa.gov>; Scozzafava, MichaelE <Scozzafava.MichaelE@epa.gov>
Subject: FW: San Jacinto RBA Conference Call Follow-up

Gary,

Thank you for sending us the attached January 16, 2015, letter following up the December 16, 2014, San Jacinto meeting regarding the site relative bioavailability (RBA) exposure factor. We have the following comments on the re-calculation of PCLs..

The attached letter provides re-calculations for site-specific non-cancer PCLs, substituting an RBA of 0.5 with an RBA of 1.0. We believe this is more consistent with Superfund risk assessment guidance, which recommends that "without data supporting the use of a site-specific RBA value, existing guidance recommends using a default value of 1.0 in risk assessments". (Language in quotations has been taken from the February 6, 2015, email from Dana Stalcup, acting Division Director for OSRTI's Assessment and Remediation Division, to the Regional Superfund Division Directors. The entire email is provided below*).

The following provides the re-calculated PCLs using an RBA of 1.0, as found in the attached January 16, 1014, letter. These non-cancer PCLs are based on the IRIS RfD for TCDD of 7×10^{-10} mg/kg-day. We have added the cancer risk associated with each PCL, using EPA's CSF for TCDD of 1.56×10^{-4} $(\text{pg-kg-day})^{-1}$ (the use of Cal EPA's CSF for TCDD of 1.3×10^{-4} $(\text{pg-kg-day})^{-1}$ yields similar results). We determined that all re-calculated non-cancer PCLs are within EPA's acceptable cancer risk range.

PCLs Based on an RBA of 1.0

Non-Cancer PCL for Commercial Workers

- 750 ppt TEQ (from 1,300 ppt TEQ, using an RBA of 0.5)
- Cancer risk of 4×10^{-5}
  PCL developed for soils and sediments in the area north of I-10 inside the footprint of the

- TCRA cap and for soils in the area south of I-10.

Non-Cancer PCL for Construction Workers

- 240 ppt TEQ (from 450 ppt TEQ, using an RBA of 0.5)
- Cancer risk of 8×10^{-7}
- PCL developed for soils in the area south of I-10 (0-10 bgs).

Non-Cancer PCL for Child Recreational Visitor

- 200 ppt TEQ (from 220 ppt TEQ, using an RBA of 0.5)
- Cancer risk of 1.7×10^{-5}
- PCL developed for sediments in the area north of I-10 outside the footprint of TCRA cap and within USEPA's Preliminary Site Perimeter. Per the site risk assessment, direct contact to sediment was found to be the driver for cancer risk, rather than fish ingestion.

And, we would like to point out that the current Regional Screening Levels (RSLs) (found at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/) are based on updated default exposure factors. While not impacting PCLs to any degree, we noted some differences in the use of default exposure factors in the site risk assessment and the current RSLs. The following is an example.

Averaging Time (AT) of 365 days/year

EPA's RSL User's Guide includes RSL calculations for a construction worker and shows that ATcw is a function of EWcw (weeks worked – assumes 50 weeks exposed/year) whereby ATcw = 50 weeks/year * 7 days/year = 350 days/year. In comparison, the PCL calculation assumes an averaging time of 365 days/year.

*

From: Stalcup, Dana
Sent: Friday, February 06, 2015 9:57 AM
To: OSWER SF Reg DDs
Cc: OSWER SF Reg Branch Chiefs; OSWER OSRTI IO; OSWER OSRTI BCs; Cheatham, Reggie; Tulis, Dana; Woodyard, Josh; Johnson, Barnes; Salyer, Kathleen; Bertrand, Charlotte; Leonard, Paul; Giacalone, Kristin
Subject: Use of Site-specific Relative Bioavailability (RBA) Data

SF Division Directors,

The purpose of this note is to remind Regions about Superfund risk assessment guidance related to the use of site-specific relative bioavailability (RBA) data. The Risk Assessment Guidance for Superfund (RAGS) Part A discusses making adjustments to Superfund site-specific risk assessments when the medium of exposure in an exposure assessment differs from the medium of exposure assumed by the toxicity value (cancer slope factor, reference dose, etc.) based upon site-specific bioavailability data . Without data supporting the use of a site-specific RBA value, existing guidance recommends using a default value of 1.0 in risk assessments. A site-specific RBA value can be derived from a properly designed study that analyzes environmental samples collected from that

site. Superfund risk assessments should not use a site-specific RBA value based on study conducted at a different site or one that is identified in the scientific literature. For more information on how to conduct a site-specific RBA study, and for general guidelines on the use of site-specific RBA values in risk assessment, please see "Guidance for Evaluating the Bioavailability of Metals in Soils for Use in Human Health Risk Assessment" (USEPA 2007) and "Soil Dioxin Relative Bioavailability Assay Evaluation Framework (USEPA 2014) .

Headquarters and the Bioavailability Technical Review Workgroup (TRW) have recently been asked to review a number of risk assessments where PRPs are proposing to inappropriately apply a site-specific RBA value from another site in their risk calculations. In those cases, the particular values are based on bioavailability studies using soil samples obtained from a site where they were originally used, not at the new site under consideration. It is therefore inappropriate to use those studies as the basis for deriving a site specific RBA at other sites.

The TRW Bioavailability Committee has established Dioxin and PAH subcommittees to help Regions evaluate the scientific rigor of site-specific RBA values. We encourage Regions to make use of this resource as they grapple with these issues at their sites. For more information, please contact Michael Scozzafava, Science Policy Branch Chief, at 703-603-8833. Thanks! - Dana

Dana Stalcup
Acting Director, Assessment and Remediation Division
OSWER/Office of Superfund Remediation and Technology Innovation (OSRTI)
Desk – 703-603-8702
Cell – 202-309-5473

From: Miller, Garyg
Sent: Tuesday, January 20, 2015 6:17 PM
To: Berg, Marlene; Burgess, Michele
Cc: Turner, Philip
Subject: FW: San Jacinto RBA Conference Call Follow-up

FYI – followup info for the San Jacinto RBA issue.

Thanks,

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

From: David Keith [mailto:dkeith@anchorqea.com]
Sent: Friday, January 16, 2015 4:15 PM
To: Miller, Garyg
Cc: Jennifer Sampson

Subject: San Jacinto RBA Conference Call Follow-up

Gary – Please see the attached in regards to the subject document. We are also providing hard copies by overnight delivery.

Regards,
David

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